

AMENDMENTS TO THE CLAIMS

WHAT IS CLAIMED IS:

1. (Original) A method for manufacturing an optical interference display panel, comprising:

providing a substrate having a micro electro mechanical structure, wherein the micro electro mechanical structure comprises:

a first electrode, on the substrate;

a sacrificial layer, on the first electrode;

a second electrode, on the sacrificial layer; and

a plurality of supports, located between the first electrode and the second electrode;

adhering the substrate to a protection structure with a first adhesive to form a cavity for enclosing the micro electro mechanical structure, wherein a sidewall of the cavity has at least one opening; and

removing the sacrificial layer by a release etching process with an etching reagent through the opening to form an optical interference reflection structure.

2. (Original) The method of claim 1, wherein a material of the first adhesive comprises spacers, and the spacers keep a predetermined distance between the protection structure and the substrate to prevent the protection structure from damaging the optical interference reflection structure.

3. (Original) The method of claim 1, wherein the first adhesive comprises a UV glue or a thermosetting adhesive.

4. (Original) The method of claim 1, wherein the method further comprises:
closing the opening after finishing the release etching process.

5. (Original) The method of claim 4, wherein the opening is closed by filling with a second adhesive.

6. (Original) The method of claim 5, wherein the second adhesive comprises a UV glue or a thermosetting adhesive.

7. (Original) The method of claim 1, wherein the protection structure is a flat protection structure or a U-shaped protection structure.

8. (Original) The method of claim 1, wherein the protection structure is a U-shaped protection structure, and the opening is positioned on a sidewall of the U-shaped protection structure.

9-14. (Cancelled)

15. (New) The method of Claim 1, wherein the sacrificial layer comprises at least one of the following: dielectric material, metal, and silicon.

16. (New) The method of Claim 1, wherein adhering the substrate comprises pressing the substrate to the protection structure.

17. (New) The method of Claim 1, wherein the first adhesive comprises a thermosetting adhesive, and wherein the adhering of the substrate further comprises heating the thermosetting adhesive.

18. (New) The method of Claim 1, wherein the opening is located in the first adhesive.

19. (New) The method of Claim 1, wherein there are two or more openings, and wherein the openings are uniformly distributed in the first adhesive.

20. (New) The method of Claim 1, wherein the micro electro mechanical structure comprises a plurality of pixels.

21. (New) The method of Claim 1, wherein the protection structure comprises at least one of the following: glass, plastic, organic polymer, and inorganic polymer.

22. (New) The method of Claim 4, wherein the closing of the opening comprises closing the opening with an adhesive to hermetically seal the cavity between the substrate and the protection structure.

23. (New) The method of Claim 4, further comprising purging the etching agent prior to closing the opening.

24. (New) A method for manufacturing an optical interference display panel, comprising:
providing a substrate having a micro electro mechanical structure, wherein the micro electro mechanical structure comprises:

a first electrode;

a second electrode;

a sacrificial layer located between the first and second electrodes; and

a plurality of supports located between the first and second electrodes;

adhering the substrate to a protection structure to form a cavity for enclosing the micro electro mechanical structure, wherein the cavity comprises at least one opening; and

passing an etching agent through the opening to remove the sacrificial layer.

25. (New) The method of claim 24, wherein the method further comprises:

closing the opening after completing the release etching process.

26. (New) The method of Claim 25, wherein the closing of the opening comprises closing the opening to hermetically seal the cavity between the substrate and the protection structure.